

AMENDMENT TO THE CLAIMS

Please amend claims 4, 7-8, 12-14, 23-24 and 27-28; cancel claims 1, 3, 5-6 and 25-26 (claims 2, 9, 19 and 21 having previously been canceled); and add new claims 29-30.

Claims 1-3 (Canceled).

4. (Currently Amended) A method for producing a cell culture matrix composition, comprising:
- ~~isolating a biological material selected from the group consisting of a full and intact whole organ; or a full and intact whole tissue, a portion of a full and intact whole organ and a portion of a full and intact whole tissue; and~~
- creating the cell culture matrix composition by converting the biological material full and intact whole organ or the full and intact whole tissue into a fine tissue powder that is included in the cell culture matrix composition; by providing the full and intact whole organ or the full and intact whole tissue; grinding the the full and intact whole organ or the full and intact whole tissue to produce a ground tissue powder and sonicating the ground tissue powder to produce the fine tissue powder.
- wherein the biological material full and intact whole organ or the full and intact whole tissue is a liver, a lung, a kidney, a pancreas, a spleen, a testis, an intestinal wall, an adrenal gland, a thyroid gland, a parathyroid gland, an ovary, a brain, skin, muscle, a blood vessel wall or bone marrow.

Claims 5-6 (Canceled).

7. (Currently Amended) The method of claim 6 4, wherein said sonicating the ground tissue powder is performed with a sonic dismembrator.
8. (Currently Amended) The method of claim 6 4, wherein; prior to sonicating the ground tissue powder, the method further includes soaking the ground tissue

powder in a medium.

Claim 9 (Canceled).

10. (Original) The method of claim 4, wherein isolating a biological material further includes employing a perfusion technique.
11. (Original) The method of claim 4, wherein after isolating the biological material, the method further includes freezing the biological material.
12. (Currently Amended) The method of claim 4, wherein, after isolating the biological material, the method further includes drying the biological material in a low-pressure tank.
13. (Currently Amended) The method of claim 11, wherein, after isolating the biological material but prior to freezing the biological material, the method further includes reducing the biological material into smaller pieces.
14. (Currently Amended) A method of using a cell culture matrix composition comprising:
 - providing cells;
 - providing a cell culture matrix composition; and
 - suspending the cells in a medium with the cell culture matrix composition, wherein the cell culture matrix composition comprises a fine tissue powder derived from a biological material selected from the group consisting of a full and intact whole organ, or a full and intact whole tissue, ~~a portion of a full and intact whole organ and a portion of a full and intact whole tissue,~~ and wherein the biological material is full and intact whole organ or the full and intact whole tissue is a liver, a lung, a kidney, a pancreas, a spleen, a testis, an intestinal wall, an adrenal gland, a thyroid gland, a parathyroid gland, an ovary, a brain, skin, muscle, a blood vessel wall or bone marrow, and

wherein the fine tissue powder is produced by providing the full and intact whole organ or the full and intact whole tissue, grinding the full and intact whole organ or the full and intact whole tissue to produce a ground tissue powder and sonicating the ground tissue powder to produce the fine tissue powder.

15. (Original) The method of claim 14, wherein providing cells further includes harvesting the cells from a mammal.
16. (Previously Presented) The method of claim 14, wherein the cells that are provided and suspended are of the same type as a type of cells present in the biological material.
17. (Original) The method of claim 14, wherein providing the cells further includes employing a perfusion technique.
18. (Original) The method of claim 14, wherein the method further includes periodically replacing the medium.

Claim 19 (Canceled).

20. (Original) The method of claim 14, wherein the cells are hepatocytes, lung cells, kidney cells, enterocytes, pancreatic islet cells, splenocytes, or neural cells.

Claim 21 (Canceled).

22. (Previously Presented) The method of claim 14, wherein the cells that are provided and suspended are of a different type than a type of cells present in the biological material.
23. (Currently Amended) A cell culture matrix composition, comprising:
a fine tissue powder derived from a full and intact whole organ; or a full

and intact whole tissue, ~~a portion of a full and intact whole organ or a portion of a full and intact whole tissue, wherein the fine tissue powder is produced by:~~

providing the full and intact whole organ or the full and intact whole tissue;

~~the process of grinding the full and intact whole organ, or the full and intact whole tissue, the portion of a full and intact whole organ or the portion of a full and intact whole tissue to produce a ground tissue powder;~~ and

sonicating the ground tissue powder to produce the fine tissue powder.

24. (Currently Amended) A cell culture matrix composition, comprising:
a fine tissue powder derived from a full and intact whole liver or a portion of a full and intact whole liver; and produced by:
providing the full and intact whole liver,
grinding the full and intact whole liver to produce a ground tissue powder, and
sonicating the ground tissue powder to produce the fine tissue powder; and
a medium.

Claims 25-26 (Canceled).

27. (Currently Amended) A cell culture matrix composition, comprising:
a fine tissue powder derived from a full and intact whole organ;
~~wherein the fine tissue powder is produced by: the process of~~
providing the full and intact whole organ;
grinding the full and intact whole organ to produce a ground tissue powder, and
sonicating the ground tissue powder to produce the fine tissue powder.
28. (Currently Amended) A method of using a cell culture matrix composition, comprising:
providing cells;

providing a cell culture matrix composition; and
suspending the cells in a medium with the cell culture matrix composition,
wherein the cell culture matrix composition comprises a fine tissue powder
produced by:

providing derived from a full and intact whole organ,
grinding the full and intact whole organ to produce a ground tissue
powder, and
sonicating the full and intact whole organ or produce the fine tissue
powder; and

wherein the full and intact whole organ is a liver, a lung, a kidney, a
pancreas, a spleen, a testis, a small intestine, a colon, an adrenal gland, a
thyroid gland, a parathyroid gland, an ovary or a brain.

29. (New) The cell culture matrix composition of claim 23, wherein the organ is a liver, a lung, a kidney, a pancreas, a spleen, a testis, an intestinal wall, an adrenal gland, a thyroid gland, a parathyroid gland, an ovary or a brain, and the tissue is skin, muscle, a blood vessel wall or bone marrow.
30. (New) The cell culture matrix composition of claim 23, further comprising a medium.